

# THE CRUSHED STONE JOURNAL

*Official Publication*  
The National Crushed Stone Association

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Our Eleventh Annual Convention  
at West Baden

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West Baden Registration Breaks All  
Previous Records

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# The CRUSHED STONE JOURNAL

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## Our Eleventh Annual Convention at West Baden

As Reviewed by A. T. GOLDBECK

A remark made at West Baden by one of our members no doubt will strike a responsive chord in all who attended our Eleventh Annual Convention, just as it was enthusiastically acclaimed by a small group who were discussing the meeting immediately before its adjournment, "I can not recall any meeting I have ever attended," remarked this particular member, "that has been as replete with good fellowship as shown here at West Baden." Good fellowship, the meeting of minds in harmony one with another for the discussion and solution of mutual problems, the excellent program of speakers not only on technical subjects but on topics of an inspirational and generally informative nature as well, the splendidly arranged and equipped Manufacturers' Exposition, the well executed plans of an able entertainment committee and, finally, an admirably suited hostelry under genial and capable management—all of these things, and more, contributed to make our Eleventh Annual Convention the largest and the most successful we have thus far held.

Just as at Detroit in 1927, one could not help absorbing the omnipresent thought which permeated the entire atmosphere of the Convention proceedings, that here surely was an industry which believed in its product and which was willing to put aside minor differences for the interests and advancement of all. Non-member producers in attendance could not but acquire a helpful knowledge of our aims and of the constructive course we are pursuing to make those aims a certainty. It is to be regretted that all producers of crushed stone in the country, whether large or small, could not have been present at West Baden. Through their absence they have unwittingly missed an inspiring contact with their fellow producers which would have given them a joy and pride in their industry not to be acquired in any other way.

Such solidity and constructiveness of thought has not been brought about over-night and without effort.

It is due in no small measure to the high thinking and unselfishness of the members, directors and officers and, in particular, to the unerring leadership of a most excellent President. It is little wonder that the Association has grown and prospered and that another high point in its activities was registered at its last annual fore-gathering.

It would be idle to attempt more than a mere resume of the proceedings of a meeting so abounding in excellent talks by men of national prominence. The address of welcome delivered in a delightfully humorous vein by the Honorable Albert J. Wedeking, member, Indiana State Highway Commission and Legislature, was just the kind of speech required to open the Convention, and the members were made to feel the welcome of their presence in the State of Indiana. L. R. Cartwright, Vice-President of the Mid-West Crushed Stone Company of Indiana, whose unremitting labor aided so materially in the success of our meeting, replied to the Commissioner in a manner of which his fellow producers were justly proud.

President Graves throughout the Convention held his well-established reputation as an eloquent speaker and again demonstrated his unusual ability as a presiding officer. He reviewed, briefly, the history of the Association and showed how, step by step, it has grown to its present importance. He referred in particular to the necessity for research in any industry which expected to hold its rightful place and to increase the value of its product. He urged the greatest support for the new research activities to be undertaken by the Engineering Bureau of the Association through the establishment of a research laboratory and expressed a faith and confidence in the success of that undertaking which must have been imparted to everyone who heard him.

The reports of the various directors on the business conditions during 1927 and the outlook for 1928 were,



**OTHO M. GRAVES**  
Re-elected President of the National Crushed Stone Association



with few exceptions, of a very optimistic nature. During 1927, six per cent more stone was sold than in 1926 and the coming year should at least equal that record.

At the luncheon address, Wm. J. Matthews, Attorney-at-Law, Chicago and New York, Counsel for various trade associations, delivered an address on "Industrial Sovereignty and Common Welfare," which was highly inspirational and if there was anyone present who had doubts of the value of cooperative effort, those doubts must have been dispelled after listening to Mr. Matthews, for he clearly showed the absolute necessity of cooperation among those engaged in the same industry. Out of this cooperation of effort, such as exemplified by the National Crushed Stone Association, is coming a real improvement in the industry and the stabilization of prices. Mr. Matthews was high in his commendation of the decision of the Association to engage in its own research and stated as his thought that it would be a severe reflection on the Association had its decision been otherwise.

A. H. Hinkle, Superintendent of Maintenance of the Indiana State Highway Commission, has rightfully won for himself a place of esteem among highway engineers. Mr. Hinkle's work is well regarded by highway engineers over all parts of the United States and his fame has even traveled abroad as evidenced by visits of highway engineers from foreign countries. Those who have had the experience of inspecting roads with Mr. Hinkle know that his prominence in his special field is well merited. He is tireless in his efforts to obtain the best results possible and the people of Indiana are indeed fortunate in having him at the head of their highway maintenance department. His address on "Bituminous Tops for Old Roads" covered the mixed type of bituminous concrete and also field treatments involving:

1. Surface treatment.
2. Mulch mix.
3. Retread top.
4. Penetration macadam.

He stated that one of the secrets of success in the bituminous type of pavement was the application of just the right amount of bituminous binder. Too much binder results in rolling and too little, in ravelling. The correct amount of binder, however, is easily controlled by proper maintenance measures. When cut-back mixtures are used, in which the tar or asphalt binder have incorporated with them a volatile material upon whose evaporation the hardening of the binder depends, the secret of success lies in the proper curing of the binder before final rolling and before the final

application of fine stone which will interfere with evaporation. If the surface is rolled and closed before proper curing takes place the bitumen will remain too soft and waving under traffic will occur. On the other hand, if the final rolling is too long delayed, ravelling of the surface due to excessive hardening of the bitumen may ensue. Mr. Hinkle has developed special devices for obtaining smooth riding qualities including the use of long base drags and his roads are known to have riding qualities equal to, if not superior to the most expensive types of pavements.

George E. Martin, Consulting Engineer of the Barrett Company, discussed Mr. Hinkle's paper in his usual concise and instructive manner.

A. T. Goldbeck, Director of the Bureau of Engineering, pointed out some of the advantages that will accrue to the producers through their support of a research laboratory to be established shortly in Washington, and in a blackboard talk showed the value of research in a particular instance of severe competition between crushed stone and gravel aggregates. The results obtained in this particular case offered a striking illustration of the possibilities of the value of research within the industry.

On Monday evening the Manufacturers' Division Exposition of quarry equipment and machinery was thrown open to the members of the Association and it is difficult to conceive of more agreeable surroundings in which to hold an exposition of this character. The booths were arranged in concentric circles in the huge atrium, topped by one of the largest domes in the world. This year the exhibits were unusually fine and the manufacturers can well be proud of their efforts to bring before the producers the latest and best equipment now on the market. The Manufacturers' Exposition is a most important feature of the annual convention and it is here that friendly contacts are made between the manufacturer and producer which will result in the selection by the producer of the particular equipment which best suits his needs. The friendly relations established at this exposition have undoubtedly resulted in the easier conduct of business because manufacturer and producer have become really acquainted one with another. To the producers and especially to those in the operating phase of the crushed stone industry the yearly Manufacturers' Exposition is a necessity, for in no other way can they so easily make a comparison of machinery and thus better judge of its relative merits for their particular demands.

The Manufacturers' Division is indeed fortunate in



**JAMES SAVAGE**

Re-elected Treasurer, National Crushed Stone Association

having C. B. Andrews of the Taylor-Wharton Iron and Steel Company of High Bridge, N. J., to serve as its chairman. He has worked quietly but incessantly for the good of the Division and of the Association. The success of the exposition is due largely to the able management of Mr. Andrews and the very efficient assistance of Mr. Boyd, Secretary of the Division.

Col. O. P. Chamberlain, Chairman of the Committee on Standards, reported on several subjects including the Standardization of drilling equipment, Standardization of Quarry Tracks and Cars and the Standardization of Commercial Sizes of Crushed Stone. Fred A. Gill of the Gill Rock Drill Company and Chairman of the Sub-committee on the Standardization of Drilling Equipment reported that the proposed standard on thread and taper had been adopted by the American Petroleum Association, but that he had not found either manufacturers or users any too willing to make

the changes necessary to bring about full standardization.

Col. Chamberlain reported for W. E. Farrell of the Easton Car and Construction Company and Chairman of the Sub-committee on Standardization of Quarry Tracks and Cars that the recommended adoption of three standard gages of track has met with no opposition. There was some apathy, however, with regard to the standardization of car equipment.

W. R. Sanborn of the Lehigh Stone Company and Chairman of the Sub-committee on Standardization of Commercial Sizes of Crushed Stone was not present and Col. Chamberlain reported that little progress had been made on this subject. As a matter of fact, before much progress can be made there must be some agreement in specifications on the shape of laboratory sieve opening to be used in the designation of sizes.

J. R. Boyd, Secretary of the Association and Chairman of the Membership Committee, reported that 24 new member firms had joined the Association in 1927 and that 354 new memberships had been procured. He also reported that correspondence seems to be an ineffective method of securing new members and that personal contacts were most effective.

Dr. George E. Ladd of the United States Bureau of Public Roads presented an interesting paper on "Broken Stone Cost Keeping Suggestions." It was based in large part on quarry investigations made by him extending over several years. He presented evidence showing that the reduction of costs involves the proper itemization of the various cost items, their comparison with similar items of cost in other quarries and on a study of such tabulations to show how particular portions of an operation might be improved. In discussion of Dr. Ladd's paper, J. R. Thoenen of the Non-metallic Division of the United States Bureau of Mines, suggested the desirability of an additional detailed study of costs to be undertaken by the Bureau of Mines provided the Crushed Stone Industry desired it. He distributed a detailed questionnaire pertaining to the various items of cost in crushed stone production.

Gilbert H. Montague, Counsellor at Law, New York City, presented a very valuable paper entitled, "Recent Steps in Business Self-Government." In discussing the extent to which information on prices could be exchanged he stated that he did not believe that bids could be exchanged until they had ripened into contracts when they could be reported at once to the secretary of an association for his record of sales and that it was quite legal to thus keep a record of current prices. Mr. Montague took up a number of other legal

questions of very great interest to crushed stone producers, but these will be presented in the full report of the proceedings of the Convention. Mr. Montague's paper was discussed by John Rice, of Easton, Pa.; W. M. Andrews, of Ohio, and John W. Stull, of Virginia.

Mr. H. G. Taylor, Manager, Public Relations Section, Car Service Division, American Railway Association, Washington, D. C., discussed "Efficient Transportation." He very forcefully showed how absolutely dependent we are on the 265,000 miles of railroads in this country and as an illustration of the extent to which the railroad enters into our everyday affairs he mentioned that at a particular luncheon given recently in Omaha, Nebraska, 8600 miles of transportation by railroad was needed for the materials in the salad served at this luncheon and that to serve a complete dinner some 80,000 miles might be needed to bring various materials together. He showed in a very striking manner how cooperation between the railroads and the users of railroad cars would make thousands of additional cars available every year. As an illustration, an increase of car loading to the extent of only 0.7 of a ton per car amounted to 721,000 additional car loads in a year's time. He made a very strong plea for the fullest cooperation between shippers and the railroads to the end that more efficient transportation might result.

John Rice of Pennsylvania led the discussion of Mr. Taylor's paper and he touched upon the matter of cleaning cars and stated that if every receiver would unload his cars cleanly a considerable saving of time would result.

The meeting of the operating men, superintendents and manufacturers under the chairmanship of A. G. Seitz of the Rock-Cut Stone Company, was held on Tuesday afternoon and some very able papers were presented. F. S. Jones of the General Crushed Stone Company discussed the matter of trucking operation in quarries in considerable detail. He stated a number of advantages of the use of trucks but cautioned every quarry operator to make a very careful study of all of his conditions before deciding to change from rail transportation to the use of trucks.

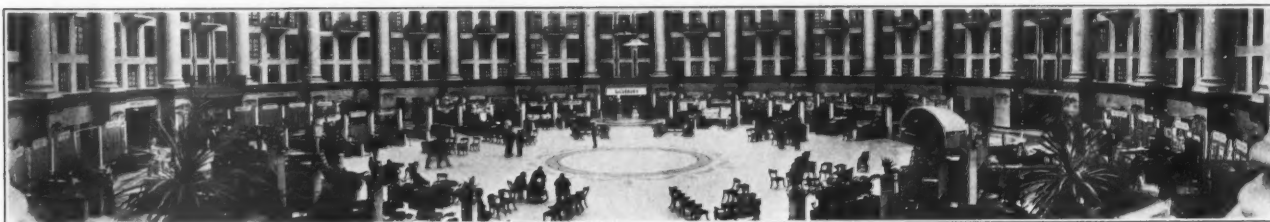
D. W. Yambert of the France Stone Company discussed the relative value of various vibrating screens. He stated as his opinion that the design of a vibrating screen should involve the following:

1. The throw should not exceed 2 or 3 times the diameter of the largest particle.
2. For fine material, high speeds and low force of vibration should be used and for coarse material low speeds and stronger vibrations should be used.
3. There is no advantage in rotation over reciprocating motion or vice versa.

Mr. Yambert's paper was fully discussed. Other interesting papers were presented at the operating session.

Simultaneously, an afternoon session was held by the sales group with H. B. Allen presiding. Interesting talks were given by Paul B. Reinhold, George E. Schaefer, A. L. Worthen, J. R. Boyd and A. T. Goldbeck. W. Scott Eames of the New Haven Trap Rock Company spoke in a pleasing, informal manner of "The Value of Advertising to the Individual Producer" and gave reminiscences of his personal experiences. He emphasized particularly the importance of honesty and sincerity on the part of salesmen. Little did those present dream that they were listening to Mr. Eames' voice for the last time. His unfortunate death which occurred in Florida several days after this meeting leaves a vacancy which will be felt a long time. The crushed stone industry has lost one of its most loyal supporters in the untimely passing of W. Scott Eames.

The Wednesday morning session was opened by R. T. Giles of the Blaw Knox Company, who presented a paper on "Separate Sizes of Coarse Aggregate for Concrete." Mr. Giles described a new method of handling aggregates for concrete highway work in which the coarse aggregate is sent to the job in two or three different sizes, later to be combined in the most suitable proportions for economy and strength. He showed how the proportions, by this method of shipment, could be made such that increased stone could be used in the



A part of the Manufacturers' Division Exposition





R. BRINK TYLER

Chairman Entertainment Committee

mixture. For instance, in North Carolina, it was found possible to change from a 1:2:4 mix to a 1:2:4.65 mix with a resulting higher-cross-breaking strength and greater density of concrete with lower absorption. Moreover, the concrete was cheaper because of the smaller amount of cement used per cubic yard.

H. S. Mattimore, Engineer of Materials of the Pennsylvania State Highway Department, presented a paper entitled "How a Mineral Aggregate Association Can Cooperate to Assure the Furnishing of Specified Material." He commended the efforts of trade associations in general and stated that he felt engineers would cooperate with them when problems were presented from an engineering standpoint. He emphasized the necessity for cleanliness in crushed stone and in discussing inspection he stated that in his opinion inspection at the source of supply in a large state like Pennsylvania was impracticable because of the large number of plants. He felt that quality of product should be necessary for membership in the National Association and that inspection of plants by the Association to insure the maintenance of a high quality product

would be very beneficial. He lauded the proposed establishment of a research laboratory and suggested that some field inspection of construction by the Association would be beneficial.

In discussing Mr. Mattimore's paper, P. J. Freeman, Chief Engineer of the Bureau of Tests and Specifications, Department of Public Works of Allegheny County, Pennsylvania, emphasized the necessity of the producers turning out correct sizes measured not by the opening in the plant screen but by the opening of the size and shape specified in a laboratory screen. He also suggested that each car should be tagged at the quarry, stating definitely what kind of stone was supposed to be in the car, such as No. 4 State Highway stone, etc.

Unfortunately, Mr. Upham, of the Highway Research Board, Washington, D. C., was unable to be present to deliver his paper on the "Value of Research." C. N. Conner, also of the Highway Research Board, made some extemporaneous remarks along the lines which he thought Mr. Upham would like to have him talk. Mr. Conner stated that one of the outstanding developments of highway construction in 1927 was the intermediate type of road. Both Mr. Upham and Mr. Conner will be remembered by the several excellent talks they have given before the Association during previous meetings.

J. V. Neubert, Chief Engineer Maintenance of Way, The New York Central Railroad Company, New York City, gave a very interesting talk, fully illustrated by lantern slides, dealing with construction and maintenance methods used in this country and abroad and contrasted the two to show the excellence of the methods used here. He also showed the damage done by the New England floods and the members could not but gain the impression that a tremendous amount of reconstruction work will be necessary in the New England States.

On Wednesday afternoon there was a session of the National Agstone Association at which the principal address was delivered by Dr. Firman Bear, Director of Soils Department, Ohio State University, Columbus, Ohio. Dr. Bear discussed in detail some of the items to be considered in the standardization of limestone for agricultural purposes. Dr. Bear's report was discussed by Harry Brandon of Ohio, Bert Keller of Chicago, Dr. H. F. Kriege of Ohio, John Laughlin of Indiana and Judson King of Ohio.

An accident prevention conference was also held at a luncheon meeting on Wednesday, presided over by N. S. Greensfelder of the Hercules Powder Company.



R. P. Blake, an engineer from Philadelphia, spoke on the "ABC's of Accident Prevention" and stated that the path to safety is through the minds of men and the moral is to make the men one-minded with regard to safety and if they are one-minded on safety they may be one-minded in other directions in which their interests and their employers' interests are one.

W. H. Weitknecht of the Lehigh Portland Cement Company, Mitchell, Indiana, gave an address on safety and stated that the cause of accidents is carelessness and discussed the value of safety committees in promoting safety work. He said that the management must assume the major responsibility for safety and where the management leads the employees will follow. W. W. Adams of the United States Bureau of Mines, Washington, D. C., traced the history of quarry accident prevention and announced the winners of the N. C. S. A. safety contest for 1926. At the closing session on Thursday morning C. D. Franks, of the Portland Cement Association, Chicago, gave a number of interesting illustrations and ideas in his talk on "Effective Support of Campaigns for Public Improvements."

M. E. Towner, General Purchasing Agent of the Western Maryland Railway Company, spoke on "Purchasing and Its Relation to Industrial Progress." His paper is worth minute study by everyone having to do with sales and purchase. Mr. Towner has evidently made a careful study, not only of the mere routine details concerned with purchasing, but of the psychology of purchasing as well. His paper is to be recorded as one of the outstanding papers of the Convention.

C. N. Bass, Commissioner of Highways and Public

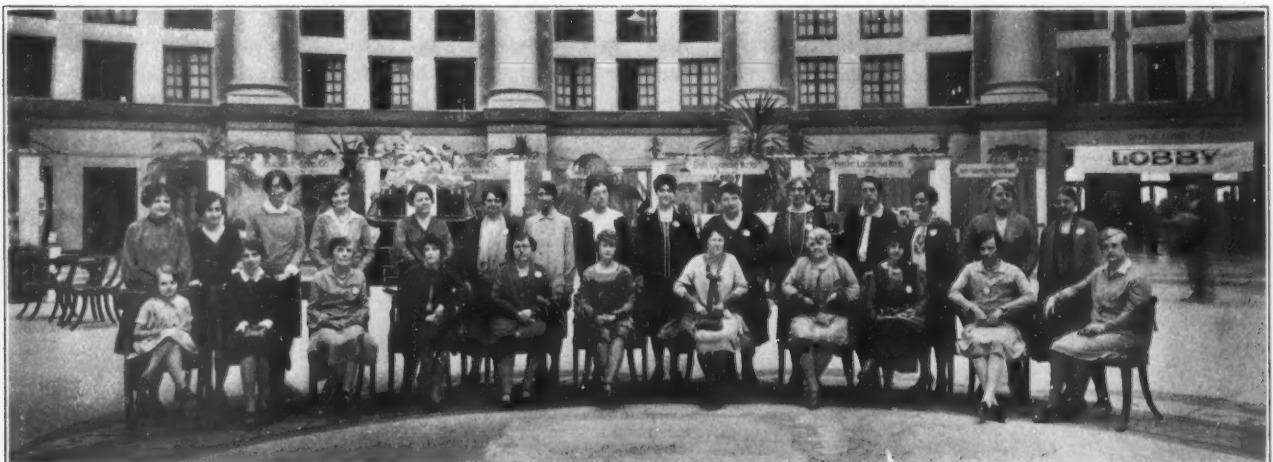
Works of the State of Tennessee, traced the Development of Highways of Tennessee and showed that remarkable progress has been made in the State within a very few years' time. Only a few years ago there were hundreds of miles of state highways that were barely travelable, but now, by the use of common sense road building methods involving stage construction, the state highway system may be traveled in safety at high speed. Mr. Bass has been associated with this work from its inception and has advanced rapidly in the state highway organization. H. E. Rodas of the Franklin Limestone Company of Nashville, Tennessee, corroborated Mr. Bass' discussion and commended him on the part he had played in the development of the state highway system.

N. S. Greensfelder of the Hercules Powder Company presented a report for the Committee on Welfare and Safety.

The entertainment features of the Convention were arranged by an Entertainment committee under the chairmanship of R. Brink Tyler, who personally attended to many of the details. An excellent smoker and vaudeville entertainment were enjoyed thoroughly by those present. Mrs. Grace Evans had charge of the entertainment for the ladies and there is no question that they had a very enjoyable time. Col. Tyler and Mrs. Evans are to be highly congratulated on the success of their efforts and the Association was most fortunate in having had them in charge of the various entertainment features.

At the banquet given on Wednesday evening, Col. Chamberlain, Vice-President of Dolese and Shepard Company, Chicago, acted as toastmaster. He presided

(Continued on page 15)



Among the Ladies Present at West Baden

## The President's Page

We commonly hold that anticipation, whether for pain or pleasure, grief or joy, exceeds realization. To such a belief, however, the Eleventh Annual Convention at West Baden proved a noteworthy exception. Optimistically and enthusiastically as we had awaited the coming of the Convention, which may properly be regarded as celebrating our tenth birthday, our great expectations did not fully measure the outstanding success of the gathering. On the opening day, the Association was exactly ten years old, it having been formed in Columbus, Ohio, January 16, 1918. While the Columbus meeting was actually but a preliminary step, the call was at that time sent out for a gathering a month or so later in Chicago to perfect the National organization. It is justifiable, however, to consider that the Association was conceived in Ohio and later born in Chicago.

Held in a small country village, with but little or no distractions outside of the large, comfortable, commodious hotel of striking beauty, with excellent cuisine, splendid facilities for the convention sessions and various group meetings, and a magnificent rotunda in which was artistically displayed the largest and most interesting exposition ever yet presented by the Manufacturers' Division, and with an attendance of somewhat over five hundred, thereby shattering the previous high record of Detroit, there can be no surprise that the enjoyability and intellectual values of the Convention reached new heights.

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To our distinguished speakers we are deeply indebted for the interesting and instructive addresses to which we listened with such pleasure. The standing and character of our Association is attested to in no uncer-

tain manner by the willingness of so many men of affairs, distinguished in their several fields of endeavor, to meet with us at our annual gatherings. They immeasurably thereby assist us in permeating the industry with that scientific attitude of mind upon which alone we are safe in building for the future. To mention any by name would be an unwarranted discrimination. Collectively, they enabled us to present to our members a well-balanced program of intense interest and value by outstanding authorities. It is but proper that you should be informed that your President has written to each of our convention guests, as well as to all of the speakers, expressing in behalf of the Association our pleasure in having them with us and our acknowledgment of the indebtedness under which they so courteously placed us.

The attitude of the audience addressed can be of greater inspirational value to the speaker than is, perhaps, commonly realized. The serious attention afforded to the speakers by those in attendance, the readiness with which the thoughts expressed were assimilated, could not but be recognized by the speakers and reflected by them in the enthusiasm with which their thoughts were presented. Those who formed the audiences at our various sessions are to be commended upon the courtesy they so unfailingly showed our guests and speakers, and it was always with confidence that the presiding officer introduced a speaker, knowing full well that he could not but be gratified with the reception afforded his words.

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It is doubtful if in any industry or profession more enjoyable banquets are held than ours at West Baden—the largest attendance in our history, the gracious



Delegates to the Eleventh Annual Convention



COL. O. P. CHAMBERLAIN  
Toastmaster

presence of a greater number of ladies than ever before, an excellent dinner, and addresses of unusual eloquence and inspiring idealism.

Colonel Chamberlain presided as toastmaster with a dignity, a gracefulness of address, and a keen humor which amply justified his selection for this post of honor.

Mr. Brosseau, President of Mack Trucks, Inc., delivered an unusually scholarly and profound address on highway problems of very real interest to our industry. Except for sudden illness, he would have addressed us on a similar occasion last year in Detroit, and we were indeed fortunate that our failure to have him then resulted in only postponing the pleasure.

The Lieutenant Governor of Indiana, the Hon. F. Harold Van Orman, enthralled us all with his brilliant eloquence, brought the tears to our eyes with tender pathos, and plunged us abruptly into convulsions of laughter. Seldom, if ever, have we been more entranced or entertained. He graced us with his presence and added immeasurably to our enjoyment.

In his characteristic manner, the Hon. Norman Hapgood analyzed keenly and delightfully the trend of public affairs, and evidenced to us those qualities of accurate discernment and charm of expression which have brought him fame in unstinted measure. We could have listened to him indefinitely.

The wholesome manliness, the fine idealism, the Scotch sturdiness, and the sparkling humor of Mr. MacIlwain served as a fitting and appropriate conclusion to a series of delightful addresses. Mr. MacIlwain talked himself straight into the hearts of the members of our Association.

In a graceful and charming manner Mr. Greensfelder, as Chairman of the Committee on Welfare and Safety, presented to the Speed Quarry of the Louisville Cement Company the first Safety Trophy open to competition by our own members only. We heartily congratulate Mr. Greensfelder upon his gracious presentation and the Louisville Cement Company in winning this token.

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Our four living ex-presidents, A. J. Blair, John Rice, E. J. Krause, and Scott Eames were present throughout the entire convention period. Since that happy foregathering, one of these four has left us. In a special issue of the Journal we have endeavored to express, though but haltingly and inadequately, our appreciation of him as a man and as a friend. To these loyal ex-presidents our hearts go out in gratitude, as it was through their foresight and wisdom that the foundation stones were laid upon which a subsequent structure might be erected. Our debt to them, which we



ion of the National Crushed Stone Association



cheerfully acknowledge, can be paid only by our gratitude and the esteem and admiration and affection we so freely extend to them.

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The Manufacturers' Exposition, extending in two concentric circles around the vast rotunda, was picturesque and charming. We hope the Manufacturers realize the interest which our members take in the various exhibits and the value to us of such a splendid exposition of quarry machinery, material and supplies.

To a striking degree the Manufacturers comprising our associate membership move with sure-footed certainty, and their keenness of judgment has been again manifested in the selection of Mr. C. B. Andrews as Chairman for the ensuing year. As is known, Mr. Andrews, as Acting Chairman, completed the unexpired term of Mr. King and his election to this important post is but a fitting tribute to the marked interest and

enthusiasm he brought to this work. Upon him has depended the collection of the individual contributions from various manufacturers in raising the \$5,000 pledged by the Division to the testing laboratory, and upon this work he is still engaged. We not only congratulate the Division, but the rest of the Association as well upon his election.

The choice of the vice-chairmen and the members of the Board of Directors of the Division was equally discriminating as to soundness of judgment.

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We felt that the problem of providing enjoyable entertainment at the Convention was two-thirds solved when Col. R. B. Tyler consented to act as chairman of the Entertainment Committee. His long experience in arranging entertainment programs for various gatherings assured that we would be better provided for in this respect than ever before; yet even with these optimistic anticipations, Colonel Tyler surprised us.

The entertainment at the smoker contributed by the Indiana Producers as hosts to the Convention, and directed and arranged for by Colonel Tyler, was most enjoyable. The Revue and vaudeville acts held in the spacious rotunda would have graced the stage of any theatre in the country. Each of the acts was a headliner. For these events, and for the various other matters which received such capable attention, we gratefully acknowledge our indebtedness to Colonel Tyler.

Mrs. Grace M. Evans as chairman of a sub-committee to provide entertainment for the ladies, carried this feature of our program far beyond anything we had conceived. She arranged teas, card parties and other social events of this sort which the ladies clearly enjoyed. With her dramatic instinct, tempered by a guiding sense of the proprieties, she gracefully brought the ladies into the limelight at our opening convention session and again at the banquet. We were indeed fortunate in having so charming a hostess and we sincerely hope that Mrs. Evans will again find it possible to serve in this capacity.

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We greatly appreciate the loyal and untiring efforts of our Regional Vice Presidents, the members of the Board of Directors, the chairmen of the standing committees and the members thereof, and other convention committees which did so much to assure the success of the Convention.

Nor do we at all underestimate the sacrifice of time being made for the welfare of the Association by our treasurer, James Savage. There is nothing spectacular in the duties which he so quietly and modestly dis-



C. B. ANDREWS

Elected Chairman Manufacturers' Division



MRS. GRACE M. EVANS

In charge of entertainment for the ladies

charges, and his reward comes only from the consciousness of a valuable service ably performed, with the realization, we hope, that his service to us is deeply appreciated.

To the young ladies in our Washington Office and in that of the President we express our sincere appreciation for their untiring devotion to the difficult tasks they so ably performed. Their faithful, conscientious and effective work was reflected in the manner in which the difficult details of registration, publication of our Daily Bulletin and other convention duties were discharged. Under the capable direction of our Secretary we have come to expect a high standard of efficiency, but the able assistance furnished by our office forces was of distinct value to him in his work. We sincerely congratulate Mr. Boyd upon the manner in which he handled the many trying and vexatious details in order that the Convention might move smoothly and easily.

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Your President speaks for the other officers, as well as for himself, in pledging to you their earnest efforts to advance the interests of the Association and the industry throughout the coming year.

## Vermont Asks \$2,650,000 to Rebuild Highways

Federal appropriations to rebuild Vermont highways in the Federal aid system were advocated before the House Committee on Roads, February 3, by representatives from Vermont supporting H. R. 9767.

Introduced by Representative Gibson (Rep.), of Brattleboro, Vt., the bill would authorize \$2,654,000 for the relief of Vermont "in the matter of roads and bridges damaged or destroyed by the recent flood."

Mr. Gibson told the Committee that the total damage by flood averaged a per capita loss of \$70.21.

"The request for relief is limited to rehabilitation of public works," Representative Brigham (Rep.), of St. Albans, Vt., told the Committee. "The per capita flood damage to highways and bridges in Vermont was \$20.93, while in States flooded by the Mississippi it was less than \$1.

"Damage per mile of road, averaging for the 15,000 miles of highways within the State, came to \$495.14, while the corresponding figure for the Southern States most damaged was \$17.64 in Arkansas."

Mr. Brigham introduced figures showing that only three States, Arkansas, Mississippi and Louisiana, exceeded Vermont's total of \$24,743,755 for all flood damage. He also pointed out, that, of 815,370 automobiles using Vermont roads in 1927, only 337,892 were Vermont cars. He quoted estimates of the Bureau of Public Roads, Department of Agriculture, placing damage to roads and bridges at \$7,377,469.

"From the figures presented," Mr. Brigham said, "as to the cost of rehabilitating our highway system, you will see that Vermont will have to pay more than \$7,775,000 for permanent construction in addition to nearly \$1,000,000 already spent for temporary construction. It is more than a small State like ours can bear and expect to do anything in the way of new construction.

"Therefore, we ask the Federal Government in this bill to assume the cost of reconstructing that part of our highways known as the Federal aid system. We will lag behind other States in Federal aid road building unless the relief is granted."

Representative Robson (Rep.), of Barboursville, Ky., on being asked if a similar bill had been introduced for Kentucky, replied: "No, but there will be."

The Chief of the Bureau of Public Roads, Thomas H. MacDonald, testified:

"Vermont damage, measured by damages to roads and bridges, was the most acute of all States injured

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## West Baden Registration Breaks All Previous Records

It is with very real gratification that we are able to announce that the West Baden Convention broke all previous registration records with the unexpectedly high total of 525. This figure compares with the total of 493 obtained at Detroit in 1927, and the total of 385 obtained at Montreal in 1926.

In the table given below there will be found a detailed analysis by States of the West Baden registration and for purposes of comparison the corresponding figures

obtained at the Detroit Convention have been included. The following should be of interest:

	West Baden	Detroit
Total Registered .....	525	493
Active Delegates .....	240	231
Associate Delegates .....	176	159
Guests .....	109	103
Active Firms Represented .....	93	93
Associate Firms Represented .....	69	57

State	Total Registered		Delegates from Active Firms		Delegates from Associate Firms		Guests		Active Firms Represented*		Associate Firms Represented*	
	W. Baden	Detroit	W. Baden	Detroit	W. Baden	Detroit	W. Baden	Detroit	W. Baden	Detroit	W. Baden	Detroit
California .....	1	3	1	3	0	0	0	0	1	2	0	0
Colorado .....	1	1	0	0	1	1	0	0	0	0	1	1
Connecticut .....	13	13	10	10	2	1	1	2	3	3	1	1
Delaware .....	11	7	2	0	8	7	1	0	1	0	3	3
Georgia .....	0	2	0	2	0	0	0	0	0	1	0	0
Illinois .....	89	75	27	23	46	35	16	17	9	10	10	11
Indiana .....	67	11	35	6	3	0	29	5	6	2	0	0
Iowa .....	5	5	2	3	2	2	1	0	2	3	1	1
Kentucky .....	13	2	7	2	1	0	5	0	6	2	0	0
Louisiana .....	1	0	0	0	0	0	1	0	0	0	0	0
Maryland .....	6	2	1	0	1	1	4	1	0	0	0	1
Massachusetts .....	11	10	8	4	1	0	2	6	4	2	0	0
Michigan .....	1	23	0	7	1	4	0	12	0	1	0	0
Minnesota .....	3	6	2	6	0	0	1	0	1	4	0	0
Missouri .....	19	9	11	5	8	1	0	3	6	4	2	0
New Jersey .....	20	15	10	10	2	1	3	4	8	7	2	1
New York .....	69	65	31	28	29	30	9	7	10	10	12	13
North Carolina .....	1	1	1	0	0	0	0	1	1	0	0	0
Ohio .....	76	113	31	64	31	32	14	17	13	16	13	8
Pennsylvania .....	68	60	32	19	29	29	7	12	9	7	19	11
Rhode Island .....	2	4	0	1	0	0	2	3	0	0	0	0
South Carolina .....	3	3	3	3	0	0	0	0	2	1	0	0
South Dakota .....	2	0	1	0	0	0	1	0	0	0	0	0
Tennessee .....	7	5	5	4	1	0	1	1	3	3	0	0
Texas .....	3	4	3	3	0	0	0	1	3	3	0	0
Virginia .....	4	1	2	1	0	0	2	0	2	1	0	0
Washington, D. C. .....	9	9	4	5	0	0	5	4	1	1	0	0
West Virginia .....	3	1	0	0	2	1	1	0	0	0	1	1
Wisconsin .....	10	15	2	5	7	9	1	1	1	3	4	4
Canada .....	7	23	4	17	1	4	2	2	1	7	0	1
No State Given .....	0	5	0	0	0	1	0	4	0	0	0	0
Total .....	525	493	240	231	176	159	109	103	93	93	69	57

\*In tabulating the number of active and associate firms represented, the firms have been listed only from the State in which their headquarters are located even though representatives were present from other States.



## West Baden Convention Elects Officers for 1928

The following officers and members of the Board of Directors of the National Crushed Stone Association were unanimously elected by the West Baden Convention for the year 1928:

### President

OTHO M. GRAVES

### Treasurer

JAMES SAVAGE

### Secretary

J. R. BOYD

### Director, Bureau of Engineering

A. T. GOLDBECK

### Regional Vice-Presidents

Mortimer Wandell, *Eastern*

Allen Patterson, *Central*

T. I. Weston, *Southern*

W. F. Wise, *Southwestern*

W. R. Sanborn, *Northern*

A. R. Wilson, *Western*

C. M. Doolittle, *Canadian*

### Board of Directors

O. M. Graves, *Chairman*.

W. M. Andrews, *Ohio*.

H. E. Bair, *Ohio*.

W. W. Boxley, *Virginia*.

C. D. Brewer, *Minnesota*.

L. R. Cartwright, *Indiana*.

O. P. Chamberlain, *Illinois*.

J. E. Cushing, *New York*.

E. E. Evans, *Ohio*.

F. O. Earnshaw, *Pennsylvania*.

F. T. Gucker, *Pennsylvania*.

W. P. Hodgkins, *Illinois*.

J. C. King, *Ohio*.

A. S. Lane, *Massachusetts*.

Harry Landa, *Texas*.

Thomas McCroskey, *Tennessee*.

R. N. McDowell, *Missouri*.

F. C. McKee, *Pennsylvania*.

F. C. Murphy, *Missouri*.

Stuyvesant Peabody, *Illinois*.

E. U. Ragland, *North Carolina*.

Russell Rarey, *Ohio*.

H. E. Rodes, *Tennessee*.

James Savage, *New York*.

F. W. Schmidt, Jr., *New Jersey*.

J. F. Schroeder, *Iowa*.

W. L. Sporborg, *New York*.

J. W. Stull, *Virginia*.

R. B. Tyler, *Kentucky*.

A. L. Worthen, *Connecticut*.

C. B. Andrews, *New Jersey*.

E. G. Lewis, *New York*.

M. B. Garber, *Ohio*.

(Ex-Presidents and Regional Vice-Presidents are ex-officio Members of the Board.)

## Manufacturers' Division Elects Officers for 1928

At a meeting of the Manufacturers' Division held at the West Baden Convention on January 18, 1928, the following officers and members of the Board of Directors were elected:

### Chairman

C. B. ANDREWS

Taylor-Wharton Iron and Steel Company  
High Bridge, New Jersey

### Vice-Chairmen

H. M. Davison,  
The Hayward Company,  
New York City.

H. T. Graceley,  
Marion Steam Shovel Company,  
Marion, Ohio.

B. G. Shotton,  
Hendrick Manufacturing Company,  
Pittsburgh, Pennsylvania.

L. W. Shugg,  
General Electric Company,  
Schenectady, New York.

M. S. Lambert  
Robins Conveying Belt Company  
Chicago, Illinois

## Board of Directors

C. B. Andrews, *Chairman*,  
Taylor-Wharton Iron & Steel Co.,  
High Bridge, N. J.

T. L. Burrell,  
Burrell Engr. & Const. Co.,  
Chicago, Illinois.

Gordon Buchanan,  
C. G. Buchanan Co.,  
New York City.

H. M. Davison,  
The Hayward Co.,  
New York City.

N. P. Farrar,  
Harnischfeger Corporation,  
Milwaukee, Wisconsin.

M. B. Garber,  
The Thew Shovel Co.,  
Lorain, Ohio.

R. W. Gillespie,  
Jeffrey Manufacturing Co.,  
Columbus, Ohio.

Fred A. Gill,  
Gill Rock Drill Co.,  
Lebanon, Pa.

N. S. Greensfelder,  
Hercules Powder Co.,  
Wilmington, Delaware.

R. Grubb,  
Canadian Explosives Co., Ltd.,  
Montreal, Canada.

John M. Johnson,  
Allis-Chalmers Mfg. Co.,  
Milwaukee, Wisconsin.

M. S. Lambert,  
Robins Conveying Belt Co.,  
Chicago, Ill.

E. G. Lewis,  
Bucyrus-Erie Company,  
New York City.

Thomas MacLachlan,  
Vulcan Iron Works,  
New York City.

A. E. Reed,  
W. S. Tyler Company,  
Cleveland, Ohio.

S. R. Russell,  
E. I. duPont de Nemours & Co.,  
Wilmington, Delaware.

B. G. Shotton,  
Hendrick Manufacturing Co.,  
Pittsburgh, Pa.

L. W. Shugg,  
General Electric Co.,  
Schenectady, N. Y.

Ralph C. Sullivan  
Rock Products  
Chicago, Illinois

## Representing the Manufacturers' Division on the Board of Directors of the National Crushed Stone Association

C. B. ANDREWS

Taylor-Wharton Iron & Steel Co.  
High Bridge, New Jersey

M. B. Garber,  
The Thew Shovel Co.,  
Lorain, Ohio.

E. G. Lewis,  
Bucyrus-Erie Company,  
New York City.

## Bill to Continue Federal Aid Receives Support

Approval of the Dowell bill (H. R. 383), to authorize \$75,000,000 a year for Federal aid highway construction work for the two fiscal years ending June 30, 1931, was urged on the House Committee on Roads, January 24, by Frank T. Sheets, President of the Association of State Highway Officials and State Highway Engineer of Illinois, Springfield, Illinois.

Mr. Sheets introduced evidence to show that States are building many miles of highways without Federal support, and argued that \$75,000,000 annually was the minimum the Government should contribute. The amount that the Government has made available for Federal-aid projects in the past two years would be continued over the next five years, under the bill. Mr. Sheets testified that in the fiscal year ended June 30, 1926, the Federal contribution was only 13.4 per cent of total expenditures of State Highway Departments.

(Continued on page 16)

## The Crushed Stone Journal

J. R. BOYD, Editor

A. T. GOLDBECK, Director, Bureau of Engineering

**The National Crushed Stone Association**

### OFFICERS

OTHO M. GRAVES, President  
Drake Building  
Easton, Pa.

J. R. BOYD, Secretary

JAMES SAVAGE, Treasurer

### REGIONAL VICE-PRESIDENTS

Mortimer Wandell (Eastern) Allen Patterson (Central)

W. R. Sanborn (Northern) T. I. Weston (Southern)

W. F. Wise (Southwestern) A. R. Wilson (Western)

C. M. Doolittle (Canadian)

### EXECUTIVE COMMITTEE

O. M. GRAVES, Chairman

W. M. Andrews  
H. E. Blair

C. M. Doolittle

E. J. Krause  
W. L. Sporborg

### EX-PRESIDENTS

A. J. Blatr

John Rice

E. J. Krause

W. Scott Eames\*

F. W. Schmidt\*

J. J. Sloan\*

\*Deceased.

## South Atlantic Crushed Stone Association Pledges Support to Testing Laboratory Fund

Just before the Convention we received a communication from R. C. Mills, newly elected Secretary of the South Atlantic Crushed Stone Association, stating that at their meeting on December 19, a resolution was passed authorizing the contribution of \$1,325.00 towards the fund being raised for the establishment of a research testing laboratory in Washington. The resolution passed was as follows:

"Resolved that this Association go on record as endorsing the proposed equipping of a laboratory for research work on crushed stone as suggested by the National Crushed Stone Association. This Association pledges itself to contribute from its membership the amount of \$1325.00."

It is particularly gratifying to receive such wholehearted endorsement and generous support from the baby association of the industry and we wish to sincerely thank them for their helpfulness and cooperation.

### W. Scott Eames

The industry will be deeply shocked and grieved to learn of the sudden death of our beloved ex-president, W. Scott Eames, which occurred at the home of Major D. A. Blakeslee in Rockledge, Florida, on January 25th.

A special edition of The Crushed Stone Journal, in memory of Mr. Eames, is now in course of preparation and will be mailed in the immediate future.

## A Business Message

The following article was brought to our attention through the courtesy of D. M. Gray, Manager of Stone Sales, Louisville Cement Company, and is published with the permission of the Kentucky Oxygen-Hydrogen Company, Inc., Louisville, Ky. It outlines the fundamental business principles formulated by W. L. Churchill, noted industrial engineer, as the result of many years experience.

## The Fair Price Principle

"The happiness and well being of more than 115,000,000 inhabitants of the United States depends either directly or indirectly on strong, growing, healthy American business.

"Healthy business conditions indicate a state of general prosperity, with steady buying and selling all the year round, and no panicky hoarding or wild spending.

"A fair price to everybody and on every commodity, be it product or labor, is the basis of sound and lasting prosperity.

"A fair price means a fair profit. It is the prime element of business success, and the surest antidote for business failure. It assures an adequate return on invested capital, ample reward for management, satisfactory wages and contented labor.

"The principle of the fair price, once well established in American industry and commerce, will double the nation's business strength and set it up on an indestructible foundation.

"The fair price assures stable prices on everything bought and sold. It increases the buying power of the producer and the consumer as well, enlarges the steady demand for all commodities, and thus is a general business tonic.

"A fair price for a product makes for a quality product. A losing price bespeaks inferior quality. Thus it is to the selfish interests of the buyers of commodities to refuse to buy at prices that do not carry a fair profit to the producer.

"There is no advantage to the manufacturer in selling his product at a price which does not allow him a fair profit. Under-pricing is a menace to industry and commerce. It endangers prosperity.

"Without exception, successful business gets a fair price—which means a fair profit—for its commodity. When it ceases to get a fair price and a fair profit it fails.

"The manufacturer earning fair profits invests a major portion of these profits in equipment, buildings, development and research, for the purpose of improv-

ing products and service and reducing costs and prices. Thus he benefits not only himself, but those from whom he buys, those to whom he sells, and those dependent on him for a livelihood.

"What is a fair price? Simply this:

"A fair profit added to the total cost of making, distributing and selling a given product—including labor, material, investment, taxes, rent, depreciation and provision for emergency.

"Business men can serve their country and themselves in no better way than to work together for universal acceptance and practice of the fair price principle."

## An Appreciation to Our Indiana Hosts

Everyone who was fortunate enough to be present at our West Baden Convention will long remember the excellent and unusual entertainment features provided for our amusement and pleasure during the meeting. From all sides we have heard nothing but words of the highest praise and our sincere thanks are due Col. R. B. Tyler, Chairman of the Entertainment Committee, and L. R. Cartwright and N. E. Kelb, who so ably assisted him.

When it was learned that due to the necessity of importing all entertainers for the Convention, the cost would be considerably more than in previous years, the Indiana producers very generously offered to contribute \$500.00 to help defray the additional expense, and we wish to express to them our sincere and grateful appreciation for their generous and helpful cooperation.

The companies contributing to this fund were as follows:

The France Stone Co. and Associated Companies.  
Mid-West Crushed Stone Company.  
The Newton County Stone Company.  
The Monon Crushed Stone Company.  
The Kokomo Stone Company.  
The Muncie Stone and Lime Company.  
The Greeley Stone Company.

## Our Eleventh Annual Convention

(Continued from page 7)

over the banquet in the manner that would be expected of him. He was very entertaining and made an excellent toastmaster.

One of the delightful entertainment features of the banquet were the vocal renditions by Earl Cartwright,

a cousin of L. R. Cartwright of Indiana. Mr. Cartwright has a magnificent baritone voice which filled the banquet hall and was a real delight to hear.

Excellent addresses were delivered by Hon. A. J. Brosseau, President, Mack Trucks, Inc., and Chairman of the Highway Committee, National Automobile Chamber of Commerce, Inc., New York City; by Hon. F. Harold Van Orman, Lieutenant Governor of Indiana; by Hon. Norman Hapgood, Journalist, Author, Editor and Ex-Minister to Denmark, and by Hon. George E. MacIlwain, Business Economist, Lecturer, Author and Analyst. One of the visitors remarked, that never had he attended a banquet where such able speakers were on the program and no doubt that same sentiment was felt if not expressed by all of those in attendance. The banquets of the National Crushed Stone Association are becoming noted for the character of their speakers and our annual meetings are well worth while attending if only to obtain inspiration from talks such as were given at our banquet held at West Baden.

N. S. Greensfelder in a very able talk presented the National Crushed Stone Association Safety Trophy to the Louisville Cement and Rock Quarry, Speed, Clark County, Indiana, which was graciously received by H. D. Baylor of that company. The France Stone Company's plant at Monroe, Michigan, and the Wickwire Spencer Steel Company's quarry at Gasport, New York, received honorable mentions for their safety records.

In the reports of the Convention Committees the Nominating Committee announced that Otho M. Graves had again been unanimously nominated for President during the coming year. In recognition of the well deserved popularity of Mr. Graves and of the incomparable work which he has done for the Association the audience stood and applauded vigorously. Although Mr. Graves expressed doubt as to the wisdom of his again serving as President, there surely was no doubt at all in the minds of the members, judging from the expressions of opinion heard on all sides and the acclaim which greeted the announcement of his nomination. He was elected unanimously near the close of the Convention.

A record of the Convention Proceedings would be incomplete without mention of the honor paid us by our sister association, The National Sand and Gravel Association. On Wednesday we were highly honored to have as our guest the newly elected President of the National Sand and Gravel Association, Mr. R. C. Fletcher of Iowa. He was introduced by President Graves and the audience welcomed him by standing



applause. In a few gracious words he conveyed to us the best wishes of his Association.

Summing up the entire Convention, it is enough to say that it was entirely successful from every angle. The total registration showed that over 500 were in attendance, the largest number we have ever had at our meetings. There were more exhibitors and the exhibits were finer. Finally, the spirit of cooperation could not have been excelled. All of these things demonstrate the firm basis upon which the Association is now founded.

### Bill to Continue Federal Aid Receives Support

*(Continued from page 11)*

Others who have appeared before the Committee in support of this bill include A. J. Brosseau, President of Mack Trucks, Inc., and Vice-President of the National Automobile Chamber of Commerce, and Frederick Brenckman, representing the National Grange.

Mr. Brosseau recommended the construction of more roads to safeguard the large investments in the automobile industry of the United States. Traffic is becoming so congested in some parts of the country, Mr. Brosseau told the Committee, that unless highway construction continues to develop, a saturation point in automobile consumption will soon be reached.

Mr. Brenckman presented a resolution adopted by the National Grange, advocating road building as an aid to the agricultural interests of the country.

### The N. C. S. A. Safety Trophy

To all of those who had the opportunity of attending the Safety Conference held during the West Baden Convention, it must have been most gratifying to realize the increasing interest which is being taken in the question of accident prevention in the crushed stone industry, a problem which is of such vital importance to our economic and humanitarian welfare. The Safety Conference, the first aid demonstrations and the Bureau of Mines Safety Car all served, and successfully so, to awaken and stimulate our safety or accident prevention consciousness.

Now the Convention is over and we have returned to pick up the threads of business for the ensuing year, are we to forget the enthusiasm kindled at West Baden and our resolve to give this problem our more serious and personal attention? There can be but one answer! Accident prevention has become a definite part of the work of this Association and the industry.

The sympathetic cooperation of every crushed stone producer, whether large or small, is the foundation upon which we must start to build.

The operators themselves, the executives, the managers, are the ones who must initiate safety campaigns within their respective plants and the National Crushed Stone Association Safety Competition provides an excellent means for arousing interest in the work of accident prevention.

The U. S. Bureau of Mines very kindly offered, through Mr. Adams, at our West Baden Convention, to receive and tabulate the accident records of our members and determine the winner of the contest, a service which if undertaken by the Association itself would involve an expense of hundreds of dollars. All members of the Association, regardless of size, are eligible to enter this contest, the only requirement being that the company agrees to provide the Bureau of Mines with a copy of each accident report covering lost time accidents. A carbon copy of the report which the State law already requires a company to send to the industrial accident commission is entirely satisfactory, or in the case of self-insurers copies of the reports which companies make to their insurance departments. Those companies entering the N. C. S. A. Safety Competition who are also eligible to enter the National Safety Competition (minimum requirements, twenty-five men inside quarry) will automatically be entered, and also those of our members entering the National Safety Competition will be automatically entered in the N. C. S. A. contest. Application blanks were enclosed in the December issue of The Crushed Stone Journal. Additional ones may be obtained upon request. Let our 1928 slogan be "All For Safety and Safety For All."

Forward your entry application immediately to the Secretary's Office or to W. W. Adams, Supervising Statistician of Accident Statistics Section, Bureau of Mines, Washington, D. C.

### Vermont Asks \$2,650,000 to Rebuild Highways

*(Continued from page 11)*

in recent floods. The figure of \$2,654,000 given in the bill, is our estimate of the cost of replacement."

Also speaking in favor of the proposed legislation were: The chairman of the Vermont State Highway Commission, G. Z. Thompson, of Proctor, Vt.; the president of the Vermont Flood Credit Corporation, Frank C. Partridge, of Proctor, Vt., and John Spargo, of Bennington, Vermont.

